

Applicant: Lih-Ping Li
Serial No.: 10/810,912
Attorney Docket No.: 67,200-1256

REMARKS

Claims 1-13 are pending herein.

Claims 1-13 are rejected.

Claims 1, 5, 6 and 10-13 are currently amended.

Specification

In the Office action, it was stated that the abstract of the disclosure should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Accordingly, it will be noted that the abstract of the disclosure has been amended to delete references that the invention is novel, as well as references to speculative applications of the invention and comparisons of the invention to the prior art.

Claim Objections

In the Office action it was stated that should claim 6 be found allowable, claim 7 would be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

It will be noted that claim 6 has been amended to recite "wherein said seasoning film comprises oxide-based material", rather than "wherein said seasoning film comprises silicon dioxide", as was formerly the case. Therefore, it is

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respectfully submitted that amended claim 6 and claim 7 are not substantial duplicates.

Claim rejections under 35 U.S.C. 112

Claims 11-13 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, it was stated that claims 11-13 depend from a non-existent claim (i.e., claim 17), and therefore, "it is impossible to determine the scope of the applicant's claimed invention".

Accordingly, it will be noted that claims 11-13 have each been amended to depend from amended independent claim 10. It is therefore respectfully submitted that claims 11-13, as dependent from amended claim 10, particularly point out and distinctly claim the subject matter which applicant regards as the invention in the manner prescribed by 35 U.S.C. 112, second paragraph. Reconsideration and allowance of claims 11-13 is therefore respectfully solicited.

Double Patenting

Claims 1 and 2 were rejected under the judicially-created doctrine of double-type patenting as being unpatentable over

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claims 1, 9 and 16 of U.S. Pat. No. 6,479,098 B1 (Yoo et al.).

It will be noted that independent claim 1, from which claim 2 depends, has been amended to define a chamber seasoning method comprising "cleaning said process chamber; and providing a seasoning film having a thickness of from about 2 μ m to about 10 μ m on said interior surfaces of said process chamber by introducing precursor gases into said process chamber at a chamber pressure of from about 10 Torr to about 760 Torr".

In light of the amendments to claim 1, it is respectfully submitted that claims 1 and 2 of the present application are not rendered obvious by claims 1, 9 and 16 of the Yoo et al. patent under the judicially-created doctrine of obviousness-type double patenting. Reconsideration and allowance of claims 1 and 2 is therefore respectfully solicited.

Claims 1 and 2 were rejected under the judicially-created doctrine of double-type patenting as being unpatentable over claims 1, 10 and 18 of U.S. Pat. No. 6,042,887 (Chien et al.).

In light of the amendments to independent claim 1 (noted above), it is respectfully submitted that claims 1 and 2 of the present application are not rendered obvious by claims 1, 10 and 18 of the Chien et al. patent under the judicially-created doctrine of obviousness-type double patenting. Reconsideration

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and allowance of claims 1 and 2 is therefore respectfully solicited.

Claim rejections under 35 U.S.C. 102

Claims 1 and 2 were rejected under 35 U.S.C. 102(b) as being anticipated by Chien et al. (U.S. Pat. No. 6,042,887).

Reference is made to MPEP 2131, which states, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference". *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

It is respectfully submitted that Chien et al. fails to anticipate amended claim 1, and claim 2 as dependent therefrom, since Chien et al. fails to disclose a chamber seasoning method comprising "cleaning said process chamber; and providing a seasoning film having a thickness of from about 2 μ m to about 10 μ m on said interior surfaces of said process chamber by introducing precursor gases into said process chamber at a chamber pressure of from about 10 Torr to about 760 Torr", as set forth in amended claim 1.

Therefore, it is respectfully submitted that Chien et al. fails to set forth "each and every element" found in amended

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claim 1, and claim 2 as dependent therefrom, as required for anticipation by the Federal Circuit decision in *Verdegaal Bros. v. Union Oil Co. of California*.

Accordingly, it is respectfully submitted that Chien et al. fails to anticipate claims 1 and 2 under 35 U.S.C. 102(b). Reconsideration and allowance of claims 1 and 2 is therefore respectfully solicited.

Claims 1, 2, 5-7, 10 and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Yoo et al. (U.S. Pat. No. 6,479,098 B1).

In light of the amendments to independent claims 1, 5 and 10, it is respectfully submitted that Yoo et al. fails to anticipate claims 1, 2, 5-7, 10 and 11 under 35 U.S.C. 102(b), as hereinafter discussed in detail.

Yoo et al. fails to disclose invention of claims 1 and 2

It is respectfully submitted that Yoo et al. fails to disclose a chamber seasoning method comprising "cleaning said process chamber; and providing a seasoning film having a thickness of from about 2 μm to about 10 μm on said interior surfaces of said process chamber by introducing precursor gases into said process chamber at a chamber pressure of from about 10 Torr to about 760 Torr", as set forth in amended claim 1 and

defined by claim 2 as dependent therefrom.

Therefore, it is respectfully submitted that Yoo et al. fails to expressly or inherently describe each and every element as set forth in amended claim 1. Accordingly, it is respectfully submitted that Yoo et al. fails to anticipate amended claims 1 and 2 under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of claims 1 and 2 is therefore respectfully solicited.

Yoo et al. fails to disclose invention of claims 5-7

It is respectfully submitted that Yoo et al. fails to disclose a chamber seasoning method comprising "cleaning said chamber; and providing a seasoning film having a thickness of from about 2 μm to about 10 μm on said interior surfaces and said gas distribution plate of said chamber by introducing precursor gases into said process chamber at a chamber pressure of from about 10 Torr to about 760 Torr at a temperature of from about 500 degrees C to about 700 degrees C", as set forth in amended claim 5 and defined by claims 6 and 7 as dependent therefrom.

Therefore, it is respectfully submitted that Yoo et al. fails to expressly or inherently describe each and every element

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as set forth in amended claim 5. Accordingly, it is respectfully submitted that Yoo et al. fails to anticipate amended claims 5-7 under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of claims 5-7 is therefore respectfully solicited.

Yoo et al. fails to disclose invention of claims 10 and 11

It is respectfully submitted that Yoo et al. fails to disclose a chamber seasoning method comprising "...providing a seasoning film having a thickness of from about 2 μm to about 10 μm on said interior surfaces and said gas distribution plate of said chamber by introducing seasoning film precursor gases into said chamber at a chamber pressure of from about 10 Torr to about 760 Torr at a temperature of from about 500 degrees C to about 700 degrees C and a process time of from about 0.5 minutes to about 10 minutes", as set forth in amended claim 10 and defined by claim 11 as dependent therefrom.

Therefore, it is respectfully submitted that Yoo et al. fails to expressly or inherently describe each and every element as set forth in amended claim 10. Accordingly, it is respectfully submitted that Yoo et al. fails to anticipate amended claims 10 and 11 under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v.*

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Union Oil Co. of California. Reconsideration and allowance of claims 10 and 11 is therefore respectfully solicited.

Claims 1-4 were rejected under 35 U.S.C. 102(b) as being anticipated by Qian et al. (U.S. Pat. No. 6,136,211).

It is respectfully submitted that Qian et al. fails to teach or suggest a method having the limitations set forth in amended claim 1, and therefore, as defined by claims 2-4 as dependent therefrom, as set forth herein above with respect to the rejection of claims 1 and 2 under 35 U.S.C. 102(b) by Yoo et al.

Thus, it is respectfully submitted that Qian et al. fails to expressly or inherently describe each and every element as set forth in amended claim 1. Accordingly, it is respectfully submitted that Qian et al. fails to anticipate amended claims 1-4 under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of claims 1-4 is therefore respectfully solicited.

Claims 1-3 were rejected under 35 U.S.C. 102(b) as being anticipated by Rossman et al. (U.S. Pat. No. 6,121,161).

It is respectfully submitted that Rossman et al. fails to teach or suggest a method having the limitations set forth in

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amended claim 1, and therefore, as defined by claims 2 and 3 as dependent therefrom, as set forth herein above with respect to the rejection of claims 1 and 2 under 35 U.S.C. 102(b) by Yoo et al.

Thus, it is respectfully submitted that Rossman et al. fails to expressly or inherently describe each and every element as set forth in amended claim 1. Accordingly, it is respectfully submitted that Rossman et al. fails to anticipate amended claims 1-3 under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of claims 1-3 is therefore respectfully solicited.

Claims 1 and 2 were rejected under 35 U.S.C. 102(b) as being anticipated by Gupta (U.S. Pat. No. 5,824,375).

It is respectfully submitted that Gupta fails to teach or suggest a method having the limitations set forth in amended claim 1, and therefore, as defined by claim 2 as dependent therefrom, as set forth herein above with respect to the rejection of claims 1 and 2 under 35 U.S.C. 102(b) by Yoo et al.

Thus, it is respectfully submitted that Gupta fails to expressly or inherently describe each and every element as set forth in amended claim 1. Accordingly, it is respectfully submitted that Gupta fails to anticipate amended claims 1 and 2

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under 35 U.S.C. 102(b) according to the criteria set forth by the Federal Circuit in *Verdegaal Bros. v. Union Oil Co. of California*. Reconsideration and allowance of claims 1 and 2 is therefore respectfully solicited.

Claim rejections under 35 U.S.C 103

Claims 5-7, 10 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (U.S. Pat. No. 5,824,375) in view of Yoo et al. (U.S. Pat. No. 6,479,098 B1).

It is respectfully submitted that Gupta in view of Yoo et al. fails to render claims 5-7, 10 and 11 obvious within the contemplation of 35 U.S.C. 103(a), as hereinafter discussed in detail.

Gupta in view of Yoo et al. fails to teach invention of claims 5-7

It is respectfully submitted that Gupta in view of Yoo et al. fails to render claims 5-7 obvious within the contemplation of 35 U.S.C. 103(a).

Specifically, it is respectfully submitted that Gupta in view of Yoo et al. fails to teach or suggest a chamber seasoning method comprising "cleaning said chamber; and providing a seasoning film having a thickness of from about 2 μ m to about 10 μ m on said interior surfaces and said gas distribution plate of

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said chamber by introducing precursor gases into said process chamber at a chamber pressure of from about 10 Torr to about 760 Torr at a temperature of from about 500 degrees C to about 700 degrees C", as set forth in amended claim 5 and defined by claims 6 and 7 as dependent therefrom.

Therefore, it is respectfully submitted that Gupta in view of Yoo et al. fails to teach or suggest all of the limitations of claims 5-7, and thus, fails to render claims 5-7 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claims 5-7 is therefore respectfully solicited.

Gupta in view of Yoo et al. fails to teach invention of claims 10 and 11

It is respectfully submitted that Gupta in view of Yoo et al. fails to render claims 10 and 11 obvious within the contemplation of 35 U.S.C. 103(a), since Gupta in view of Yoo et al. fails to teach or suggest a chamber seasoning method comprising "cleaning said chamber; and providing a seasoning film having a thickness of from about 2 μ m to about 10 μ m on said interior surfaces and said gas distribution plate of said chamber by introducing seasoning film precursor gases into said chamber at a chamber pressure of from about 10 Torr to about 760 Torr at a temperature of from about 500 degrees C to about 700 degrees C and a process time of from about 0.5 minutes to about

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10 minutes", as set forth in amended claim 10 and defined by claim 11 as dependent therefrom.

Therefore, it is respectfully submitted that Gupta in view of Yoo et al. fails to teach or suggest all of the limitations of claims 10 and 11, and thus, fails to render claims 5-7 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claims 10 and 11 is therefore respectfully solicited.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (U.S. Pat. No. 5,824,375) in view of Xi et al. (U.S. Pat. No. 6,323,119 B1) or Rossman et al. (U.S. Pat. No. 6,121,161).

As claim 3 depends from amended claim 1, and therefore, defines the limitations set forth in amended claim 1, it is respectfully submitted that Gupta in view of Xi et al. or Rossman et al. fails to render claim 3 obvious under 35 U.S.C. 103(a).

Specifically, it is respectfully submitted that Gupta in view of Xi et al. or Rossman et al. fails to teach or suggest a chamber seasoning method comprising "cleaning said process chamber; and providing a seasoning film having a thickness of from about 2 μm to about 10 μm on said interior surfaces of said process chamber by introducing precursor gases into said process

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chamber at a chamber pressure of from about 10 Torr to about 760 Torr", as set forth in amended claim 1 and defined by claim 3 as dependent therefrom.

Therefore, it is respectfully submitted that Gupta in view of Xi et al. or Rossman et al. fails to teach or suggest all of the limitations of claim 3, as dependent from amended claim 1, and thus, fails to render claim 3 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claim 3 is therefore respectfully solicited.

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (U.S. Pat. No. 5,824,375) in view of Boeglin (U.S. Pat. No. 5,061,514).

As claim 4 depends from amended claim 1, and therefore, defines the limitations set forth in amended claim 1, it is respectfully submitted that Gupta in view of Boeglin fails to render claim 4 obvious under 35 U.S.C. 103(a), as set forth herein above with respect to the rejection of claim 3.

Therefore, it is respectfully submitted that Gupta in view of Boeglin fails to teach or suggest all of the limitations of claim 4, as dependent from amended claim 1, and thus, fails to render claim 4 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claim 4 is therefore respectfully solicited.

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Claims 8 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (U.S. Pat. No. 5,824,375) in view of Yoo et al. (U.S. Pat. No. 6,479,098 B1), in further view of Xi et al. (U.S. Pat. No. 6,323,119 B1) or Rossman et al. (U.S. Pat. No. 6,121,161).

In light of the amendments to independent claim 5, from which claim 8 depends, and to independent claim 10, from which claim 12 depends, it is respectfully submitted that Gupta in view of Yoo et al. and in further view of Xi et al. or Rossman et al. fails to teach or suggest all of the limitations of claim 8 as dependent from amended claim 5 and of claim 12 as dependent from amended claim 10.

Therefore, it is respectfully submitted that Gupta in view of Yoo et al. and in further view of Xi et al. or Rossman et al. fails to render claims 8 and 12 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claims 8 and 12 is therefore respectfully solicited.

Claims 9 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta (U.S. Pat. No. 5,824,375) in view of Yoo et al. (U.S. Pat. No. 6,479,098 B1), in further view of Boeglin (U.S. Pat. No. 5,061,514).

In light of the amendments to independent claim 5, from which claim 9 depends, and to independent claim 10, from which

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claim 13 depends, it is respectfully submitted that Gupta in view of Yoo et al. and in further view of Boeglin fails to teach or suggest all of the limitations of claim 9 as dependent from amended claim 5 and of claim 13 as dependent from amended claim 10.

Therefore, it is respectfully submitted that Gupta in view of Yoo et al. and in further view of Boeglin fails to render claims 9 and 13 obvious within the contemplation of 35 U.S.C. 103(a). Reconsideration and allowance of claims 9 and 13 is therefore respectfully solicited.

Conclusion

Every effort has been made to amend applicant's claims in order to define his invention in the scope to which it is entitled. Accordingly, reconsideration and allowance of claims 1-13 is respectfully solicited.

Respectfully submitted,



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